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ORIGINAL ARTICLES

CHEMOTHERAPY OF NEUROSYPHILIS

By SAMUEL H. EPSTEIN, M.D.

Assistant in Therapeutic Research, Boston Psychopathic Hospital; Assistant in Psychiatry, Harvard Medical School, Boston

In using various drugs in the treatment of neurosyphilis, I have been impressed by the great difference between arsphenamin and tryparsamide. In this paper I shall attempt to point out the differential therapeutic effects of these two drugs, and emphasize the value of tryparsamide in the treatment of syphilis of the central nervous system.

Both arsphenamin and tryparsamide are antiluetic remedies. Arsphenamin is a well-known spirocheticide and is of value in the treatment of early syphilis. On the other hand, tryparsamide has very little spirochetal effect as measured by the results of treatment in cases of early syphilis. Nevertheless, tryparsamide has a very definite beneficial effect on syphilis of the central nervous system. The mechanism of its action is not known. Two theories have been advanced to explain its effects. The first is that the drug stimulates metabolism. The only evidence for this is the gain in weight that sometimes follows its use. The other explanation of its effectiveness is that it penetrates the central nervous system to a greater degree than does arsphenamin. But since tryparsamide is not spirocheticidal, it cannot be expected to accomplish its results in this way. Its mode of action, therefore, must be quite different from that of arsphenamin.

In actual practice, it is found that tryparsamide has no effect on the systemic symptoms of syphilis, either early or late. A case which illustrates this in a very striking fashion is that of a woman diagnosed as a syphilitic epileptic with a positive spinal fluid. She was treated for two years with tryparsamide and fever therapy. While receiving tryparsamide, she developed a tumor on the forehead. An x-ray picture was typical of a gumma involving the frontal bone. This late manifestation of systemic syphilis occurred during a period in which there was clinical improvement as regards the convulsions and the mental state of the patient, and with the spinal fluid which had become entirely normal. A few injections of arsphenamin was followed by improvement in the gumma as demonstrated both by the superficial tumor and the x-ray findings, and in the course of a few months of treatment with arsphenamin, the bone again appeared normal. Apparently in this case tryparsamide was effective in clearing up the neurosyphilitic process, but did not prevent the development of a gumma. Involution of this process occurred only after the use of arsphenamin, emphasizing the value of this drug in systemic syphilis.

The reverse of this sequence of events is frequently seen in the treatment of early syphilis. It is well recognized that there are many cases of syphilis treated from the primary stage which develop central nervous system syphilis despite the ordinary routine treatment with arsphenamin, mercury, bismuth and iodides. Many of these cases develop both the symptoms and a positive spinal fluid serology during treatment which has been successful in clearing up the primary and secondary skin manifestations, and which has produced a negative Wassermann reaction of the blood. Involution of the central nervous system symptoms with return of the spinal fluid serology to normal takes place, however, following the use of tryparsamide.

A striking illustration of this phenomenon is furnished by a case of Dr. H. C. Solomon. This patient began treatment during the latter part of his primary period. Under conventional arsphenamin, bismuth and mercurial treatment, his blood became negative and he was symptom free. A year after the beginning of treatment he complained of severe headache, and examination showed evidences of a syphilitic meningitis. The spinal fluid was strongly positive in each test, with approximately 1000 cells per cmm. The patient was given weekly injections of tryparsamide unaided by any other drug. The symptoms promptly receded, and after a few months of tryparsamide treatment the spinal fluid had become negative.

Later developments in this case were still more illuminating. While the patient was receiving tryparsamide, he had a relapse of blood Wassermann,

which became positive, and he developed recurrent secondary skin and mucous membrane lesions. This occurred during a period in which involution of the neurosyphilitic process had taken place. After a short period of treatment with arsphenamin, the lesions all disappeared and the blood again became negative. The constant response of manifestations of systemic syphilis to arsphenamin and the selective action of tryparsamide on neurosyphilitic manifestations are both demonstrated in the same case.

Another difference between the effects of arsphenamin and tryparsamide is seen in their effects on malaria. Arsphenamin will stop the inoculation of malaria very promptly. Tryparsamide, on the other hand, has no obvious effects on the course of the disease and may be given simultaneously in the treatment of general paresis.

The effect of tryparsamide on the spinal fluid serology in cases of general paresis stands out in striking contrast to the results produced by arsphenamin. In these cases it is indeed exceptional for the spinal fluid serology to improve under arsphenamin therapy. On the contrary, it is the rule for improvement to take place when an adequate amount of tryparsamide is used. It is only the exceptional case of general paresis in which a definite improvement of the spinal fluid could not be obtained if tryparsamide is continued long enough. The time element is extremely important. Treatment over a period of years is necessary. In the presence of a negative spinal fluid, there is every reason to expect a clinical remission and little chance of relapse, since the spinal fluid is considered a valid index of progress under treatment.

Tryparsamide, then, is the drug of choice in the treatment of syphilis of the central nervous system. The early cases of the meningeal variety respond extremely well, practically without exception. This holds true for the ordinary type of early meningovascular neurosyphilis. Almost always clinical improvement will be noted in the course of three or four weeks. Serological cure occurs in the course of a few months, and is inevitable. In late neurosyphilis of the more benign varieties, that is, in cases of so-called cerebrospinal syphilis, tryparsamide is effective much as in the early cases, but treatment must be continued over a longer period of time before the spinal fluid becomes negative. When one deals with late neurosyphilis, especially in cases of general paresis, there is always a possibility of having pathological changes that are fixed and irreparable. These cases can be made serologically negative eventually, but remain at a poor clinical level. However, in the group of deteriorated cases, tryparsamide therapy has apparently maintained good physical condition and prolonged the duration of life.

Discussion of Dr. Epstein's Paper

DR. CORSON: Did you continue all of your series with tryparsamide alone? A good many people believe that tryparsamide is useless alone.

DR. ROTHSCHILD: I am interested in the point that was made as to the effects of the neurological cases. I don't think we can say but our experience would bear out what Dr. Epstein said. I was impressed by his saying that we don't know what it did. I would like to find out really how it acts on the central nervous system.

DR. HUGHES: Should one give more than fifty injections of tryparsamide before giving up hope of results?

DR. KIENE: I should like to know the effect of tryparsamide on the eyes. There is always the consideration of changes in the retina.

DR. EPSTEIN: We use tryparsamide alone in cases of neurosyphilis. As I have said before, the action of this drug on the central nervous system is not known. Researches are being carried on to determine the role of the reticulo-endothelial system. In cases of paresis treated by tryparsamide alone, we have obtained 30 to 35 percent remissions. This result corresponds fairly well with the group of cases treated by malaria and other febrile methods. I do not believe we can hold a brief for one form of therapy against another. However, a patient who does not do well on tryparsamide alone is a justifiable candidate for febrile therapy. In many instances excellent results have been obtained in this way. I might mention as an example the case of a young man who showed signs of neurosyphilis with strongly positive serology and a depressed mental state. He was put on tryparsamide therapy with clinical and serological improvement. After four years of treatment he presented the typical mental picture of paresis and the spinal fluid which had been improving again became strongly positive. He was then given a course of malaria followed by tryparsamide, with the result that he has made an excellent clinical remission and the spinal fluid has become entirely negative.

DR. CORSON: Did you pick different types of cases for tryparsamide? Is there anything in the two groups which would account for differences?

DR. EPSTEIN: Our routine is to give malaria, when possible, in cases of paresis, following this by tryparsamide. However, in the exigencies of our work, we find cases that we cannot hospitalize for malaria, or whose physical condition is such that we do not consider malaria advisable, in which case we treat them with tryparsamide alone. If the results are not satisfactory, then we give fever treatments. It is not possible to determine which type of case will do well with tryparsamide and which will be benefited by malaria. It is fair to state, however, that the early cases show better results with both forms of therapy. In cases showing evidence of considerable destruction of the cortex, neither tryparsamide nor malaria can be expected to repair the damage.

Regarding the number of doses of tryparsamide to be given, I do not believe we can set down any rules. We continue treatment until the spinal fluid has become normal and remains so for a period of several years. At first we give weekly injections. Later we stretch the interval to two weeks, one month, six weeks, etc., keeping the patient and his spinal fluid under observation over a period of years. Persistence is the keynote of success in the treatment of neurosyphilitic cases. Many of our cases have had over 100 doses of tryparsamide, and one patient in our series received 242 injections! The usual adult dose is 3 grams, but this is reduced whenever evidence of intolerance to the drug appears.

This brings us to the question of the untoward effects of tryparsamide, especially its effect on the optic nerve. Interference with vision occurs in about 3 percent of the cases treated. Subjective visual disorders appear long before there is objective evidence of optic nerve damage. It is important, therefore, to watch for these symptoms, especially after the first few injections. If the drug is withheld for a time, the visual disorders disappear readily, and permanent damage is usually prevented. Treatment may then be resumed, beginning with small doses and gradually building up to the regular dosage of 3 grams. The other untoward effects of tryparsamide are not very important. Rarely patients show intolerance to the drug manifested by fever, chills, nausea and anorexia. Occasionally a patient shows a dermatitis or jaundice, but never in my experience have these been serious.

DR. KIENE: Do you do visual fields?

DR. EPSTEIN: We do at least rough visual fields in every case before starting tryparsamide.

DR. CORSON: Is there any special advantage in giving something like bismuth simultaneously with tryparsamide?

DR. EPSTEIN: Bismuth may be combined with tryparsamide, but I see no special advantage in it.

DR. CORSON: Is there a cumulative effect with tryparsamide?

DR. EPSTEIN: Some evidence for that may be obtained from the spinal fluid findings of lapsed treatment cases. Lumbar punctures done on these patients after they are returned to the clinic sometimes show marked serological improvement compared with the previous spinal fluid examinations. It is fair to attribute this reaction to the effect of the tryparsamide given previously.

BASAL METABOLISM IN DIAGNOSIS AND TREATMENT OF DISEASE*

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My original intention was to give a brief outline of the work that has been done in metabolism relative to diagnosis and treatment of disease. But on further consideration I felt that a short historical summary concerning the development of this science might be of some interest.

Generally speaking, this is not exactly a new science. In a crude way the ancients at the time of Hippocrates felt that something was taking place in the human make-up at all times. They called this something "Insensible Perspiration." From observations, they could see that the average adult weight remains more or less constant in spite of the fact that the total ingesta of food and fluid is in definite excess of the total measureable excreta. This was later, in 1614, proven by Sanctorius. He placed a subject in an experimental chair suspended from a balance. The subject was allowed to eat enough food to balance the scale level and remained unseated. In a short while he noticed that the end of the scale balance began to rise, due to

*Read before the Jacobi Medical Society, Providence, April, 1932.

loss of weight or "Insensible Perspiration" termed by these ancient clinicians and now experimentally proven by Sanctorius.[1] In 1780, Lavoisier, a Frenchman, constructed the first calorimeter, and he was the first one to mention the significance of oxygen in respiration. Many of his conceptions were erroneous, but his contributions in general are hailed as the foundation stone to modern work in metabolism.

The history of metabolism is linked with the names of many illustrious clinicians and chemists. However, since this paper does not concern itself with a detailed history of this science, suffice it just to mention in passing some of these men. The first description of a closed circuit apparatus for the measurement of the oxygen consumption and carbon dioxide production in animals was published in 1849 by Regnault and Reiset, of the French school. Liebig[2] was the first one to divide the food stuffs into carbohydrate, fat, and protein. Voit and his pupils, especially Pettenkofer and Rubner, have enriched the literature on metabolism with many original contributions. Pettenkofer constructed a respiration calorimeter by means of which he was able to collect and study the carbon dioxide in experimental animals. Rubner built the first respiration calorimeter with which he could prove that the food oxidized in the body gave off the same amount of heat as if burned outside of the body, a contention which was independently worked out by Richet, a Frenchman, about the same time.

In about the year 1894, Magnus-Levy interested himself in this work. His researches were so accurate and his observations so complete that very little in the line of originality was left to his successors to do. He was the first to realize the importance of studying the metabolism in normal controls so as to be able more thoroughly and accurately to study pathologic states. One of his important contributions was the demonstration of an increase in the metabolism in exophthalmic goitre, in 1895. Clinically this was observed by Friedrich Mueler. He showed that the excess nitrogen loss in these patients was tremendous.

In the field of metabolism, the United States is second to none. The work of men like Atwater, Benedict, Means, Boothby, Aub, Dubois, Lusk, and others, is well known to students of metabolism. Their reputation is certainly enviable. The tremendous growth in interest in this field of endeavor in the last two decades or so is indeed due to the work of these men, first, because of ingenious simplification of the unit respiration apparatus, and secondly, because of the simplification of the technic through their efforts.

Food is a prerequisite to maintain life. The food ingested is utilized to supply energy and heat, to repair tissue waste, and build new tissues. Foods are classified into carbohydrates, proteins and fats, plus the mineral salts, vitamines and water contained therein. The chemical and physiological change which takes place in the living cell when food is ingested is called metabolism. To clarify the above definition of metabolism, Rabinowitch[3] adds the following: "The greatest chemical change which takes place in the human body is that of oxidation and the greatest amount of oxidizable matter is organic matter. Organic matter contains carbon and when carbon burns carbon dioxide is produced. The end result is heat production." It becomes obvious from these facts that the magnitude of metabolism may be measured in three different ways, (1) Oxygen consumption, (2) Carbon dioxide elimination, and (3) Heat production.

There are many factors that influence metabolism. They are food, exercise, fear, restlessness, fever, muscle tone, and rest. When we reduce the above factors to a minimum that may be compatible with life, we have established the basal metabolism of an individual. In other words, by basal metabolism we mean the minimal heat produced by an individual during the post absorptive state; that is, 12 to 14 hours after eating and at rest.[4]

The methods employed to determine the basal metabolic rate are:

1. Direct calorimetry; chamber calorimeter.

2. Indirect calorimetry; (a) either through measuring the amount of oxygen absorbed or (b) carbon dioxide eliminated. The simplest method and the one universally used in ordinary clinical work is the determination of the amount of oxygen absorbed during a given period of time. Basal metabolism studies have been made in conditions such as obesity, diabetes mellitus, cardio-renal disease, pernicious anemia, leukemia, typhoid fever, pregnancy, inanition, tuberculosis, and diseases of the thyroid gland. The results of these studies will be discussed later in this paper.

The standard of heat production is the number of calories produced per square meter of body surface during a given unit of time. Each individual

has a different surface area. This has been worked out by DuBois according to the height and weight of the individual. Plus or minus ten or even fifteen, according to some observers, is considered a normal basal rate variation. If one errs in the interpretation of a basal rate reading, it usually is on the plus side. For instance, a normal rate invariably rules out hyperthyroidism, while a high rate does not necessarily mean that an individual is suffering from Grave's disease. There are many factors which influence the rate on the plus side, aside from thyroid conditions, such as neurasthenia, fever, increased muscle tone, fear, anxiety, and so forth. Dr. Crile of Cleveland inferred that one can get a high rate in neurocirculatory asthenia, and even in the ordinary so-called tachycardias of the paroxysmal type.[5]

Recently there has been a tendency to push the upper limit off normal to the plus 15% and the lower limit to minus 5%, although some observers have noted a rather low rate in supposedly normal subjects. G. W. Wells,[6] in a recent study of 143 normal female subjects, all college students and in good health, summarizes his findings as follows: 81 or 56.6% fell within the normal group of plus or minus 10%, 4 or 2.7% were above plus 10%, and 58 or 40.5% were below minus 10%. The highest rate recorded was a plus 13%, the lowest, minus 27%. All the subjects who showed a reading of lower than minus 10% did not evince any symptoms of hypothyroid function, such as fatiguability, irritability, dry skin, slow pulse and tendency to gain weight. Are these symptoms latent because the subjects are young? Time will tell. At present it is questioned.

In typhoid fever one may encounter a basal rate as high as plus 50%, varying according to the height of the fever. In tuberculosis with normal temperature or slightly elevated the variation will not reach much above the normal upper limit. In fact, it may be somewhat lower. With a rise in temperature the basal rate rises accordingly. In diabetes mellitus the rate is usually below normal. The undernutritional state of the patient and lack of muscular activity is responsible for this.

In obesity due to thyroid deficiency the rate is naturally below normal. Those who are obese because of overeating and inactivity, the rate is within normal limits. Well compensated cardiacs and mild nephritics show a normal variation. Cardiacs who are decompensated usually give a reading which is higher than normal. The degree of decompensation has a direct bearing on the rate. If the edema is extensive a minus reading is possible. This can be accounted by the increase in the surface area. Severe nephritics who have not undergone a rigid and restricted dietary regime register on the plus side, otherwise they border on the minus side. The basal metabolic rate in acute pernicious anemia and leukemia is quite high, as it is also in Hodgkin's disease. In chronic anemias it may be low. Anemias, when influenced by transfusions, usually give a minus reading.[7] In chronic arthritis the rate as a rule is below normal. This is probably due to the decreased muscle tone in these patients.

Considerable work has been done to determine the effect of menstruation and pregnancy on the basal metabolic rate.[8] The results are rather confusing. But most workers have reached these conclusions: The rate is usually increased at the premenstrual period. Menstruation in itself is not associated with an increase in the rate unless there is pain. During the early months of pregnancy the rate is within normal limits, but is increased during the last three months of pregnancy. This is accounted for by the fact that the fetus and placenta represent an appreciable amount of active protoplasmic mass. In addition, there may be embarrassment of the respirations and marked fetal movements.[9a] This results in increased activity of the muscles of respiration, which in itself tends to increase metabolism. Lactation, too, tends to increase the rate.

X-ray therapy tends to increase metabolism because the first effect of x-ray exposure is destruction of tissue, which is readily seen by the increase in the urinary nitrogen excretion.[9b] This increased protein destruction is responsible for the increase in the metabolism rate. For some unknown reason the metabolism tends to decrease at the menopause. The diminished activity so common at this period is not sufficient to account for the decrease. The diminished ovarian secretion seems to have some influence in lowering the metabolism as shown experimentally by removing the ovaries by operation or destroying them by x-ray or radium therapy. Thyroid therapy in these cases does no good at all; it may even do harm because of its deleterious effect on the heart muscle. Diseases of the hypophysis also have a tendency to lower the metabolism. This is not due particularly to pathology of the pituitary, but to the interrelated influence this gland has on the thyroid.

It is generally conceded that metabolism determinations serve its greatest value in diseases of the thyroid gland. In Grave's disease it is a very important differential point and a true index as to the severity of the condition. Border line cases can be more rationally controlled, and endocrine-sympathetic syndromes can be definitely ruled out by this means. Dr. Bela Mittleman[10] recently reported a case that was admitted to the hospital complaining of nervousness, tremor of hands, profuse sweating, palpitation, and exophthalmos. The Von Graefe sign was slightly positive on the right. Clinically this was a clear cut case of Grave's disease, but the basal metabolism definitely ruled out an hyperthyroid condition. On three occasions the metabolism test was normal or rather low, namely, minus 10%, minus 10%, and minus 13%. In low functioning thyroid conditions the metabolism is of even greater significance, because the symptom complex in these cases is rather more obscure except in the late stages. The treatment, too, is indefinitely prolonged, and the patient who receives thyroid therapy has to be and should be watched very closely. Even in advanced cases of myxedema and cretinism there is danger of overtreatment with thyroid, because the heart muscle in these patients is naturally weaker than in normal individuals. Here excess thyroid not only defeats its purpose, but adds insult to injury.

Before concluding, I wish to cite a formula by which one may roughly determine the basal metabolism without actually doing the test. In 1924, Read[11] published a formula for the prediction of basal metabolism from basal pulse rate and basal pulse pressure. It reads as follows: "0.75 (pulse rate plus 0.74 pulse pressure) — 72 equals basal rate." Read further states that by this formula it was possible to predict the basal rate within 10% in a little more than 50% of the cases. Other investigators have reached a similar conclusion. Recently, R. L. Jenkins, M.D.[12] studied 4120 routine basal metabolism determinations using Read's formula as a check, and his conclusions are strikingly similar to those of Read, and he affirms that "This measure should be of value as a procedure supplementary and confirmatory to basal metabolism determinations in the diagnosis of metabolic disease."

In conclusion, let me state that basal metabolism determination is just one more laboratory procedure which is very helpful if backed by sufficient clinical evidence, but very distressing when the clinical evidence is contrariwise.

References

1. King: Basal Metabolism 1924. Williams and Wilkins Co.

2. DuBois, Eugene F.: Basal Metabolism in Health and Disease. Lea and Febiger, 1924.

3. Rabinowitch, I. M.: Pitfalls in the clinical application and interpretation of the B. M. R. The Canadian Medical Association Journal 23:152-160, August, 1930.

4. Ibid 3.

5. Dr. Crile: Talk delivered April 18, 1932, before the Harvey Medical Society at the Beth Israel Hospital, Boston, Mass. Topic: The Denervation of the Adrenals.

6. Wells, G. W.: Basal Metabolism in Young Women. R. I. Medical Journal, August, 1931, p. 121.

7. Mosenthal, H. O., and Marks, H. E.: The Clinical Value of B. M. Medical Clinics of North America 4:1403-1422, March, 1921.

8. Scontrino, A.: Basal Metabolism During Pregnancy, Puerperium, and Gynecological Disorders; Rassegna d'ostet, et ginec., 37:675-703, November, 1928 (W. F. Prior service).

9a. Ibid 3.

9b. Ibid 3.

10. Mittleman, B.: Medical Clinics North America, Mar., 1932, p. 1225-1229. A Case of Autonomic Imbalance.

11. Read, J. Marion: Basal Pulse Rate and Pulse Pressure Changes Accompanying Variations in B. M. R. Arch. Int. Med. 34:553, October, 1924.

12. Jenkins, R. L.: Basal Metabolism (The basal pulse complex). Arch. Int. Med., February, 1932, p. 188.

NOTICE

The American College of Physicians to meet in Montreal, February 6-10, 1933

Announcement has been made that the American College of Physicians will hold its Seventeenth Annual Clinical Session at Montreal, with headquarters at the Windsor Hotel, February 6-10, 1933.

Dr. Francis M. Pottenger of Monrovia, Calif., as President of the College, has charge of the program of general sessions. Dr. Jonathan C. Meakins, Professor of Medicine and Director of the Department, McGill University Faculty of Medicine, is general chairman of local arrangements and in charge of the program of clinics. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general business arrangements, and may be addressed concerning any feature of the forthcoming session, including copies of the program.

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The R. I. Medico-Legal Society—Last Thursday—January, April, June and October, Dr. Fenwick G. Taggart, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

EDITORIALS

CATALOGUE THE LIBRARY

A distinguished guest recently visited the library of the Rhode Island Medical Society and expressed great surprise and admiration for the collection of books on its shelves. Such expressions are not unique, for some of our guests have never seen many of the books we have, and it would be unusual if admiration were not forthcoming.

However, only a few of the members of the Society know what books the library possesses. The distinguished guest pointed out many things about the collection that were new to most of us. Such a situation is extraordinary, at least it should be so. Here we have treasures that are envied by scholars in great medical teaching centers, treasures that famous teachers look upon with awe, while we are unaware of their existence, even in our own library. The reason for this apparent lack of interest in the library is not due to a lack of appreciation for good books. Invariably interest is aroused whenever the

members are appraised of the facts. The chief reason for our apathy is the lack of a proper catalogue for the library. We have no good way of knowing what is in the library. The work of cataloguing is comparatively slight now, but becomes increasingly difficult as the years go on. At the present time a slight tax on each member of the Rhode Island Medical Society would put our library in a first-class condition and would make it one of the very good medical libraries in America. If an extra tax is undesirable, contributions from the members of the Society would easily take care of the cost of instituting a good catalogue system. We have something possessed by only a few, something worth while and valuable. Let the members make sure they get their full value by having a workable library.

OBESITY

It is perhaps more because of its relation to personal appearance rather than its relation to disease that obesity is now one of the most talked of questions in every day life. It is, therefore, to be wondered just what the position of obesity is in the etiology of disease; what part it plays as a companion to other pathological conditions, and whether or not it really is an abnormal condition. There are plenty of instances in which circulatory and respiratory embarrassments are readily cured by reduction of weight, the heart having been relieved of a burden by the reduction of excess baggage. It is also to be learned whether one is justified in recommending the reduction of weight of a person who is evidently overweight. Such advice would be founded upon the well known facts that sudden death is not uncommon in very heavy persons, and that overweight seems to predispose to diabetes. But, as yet, we do not know how many persons who die suddenly are obese, or how many fat people become diabetic. Many persons who are large live far beyond the usual expectation of life, and we also know that the same diet that makes people obese is far beyond the usual sugar tolerance. Evidence is constantly accumulating of overweight persons who are much improved in health by eating less, which is, of course, the primary agent in weight reduction. One also sees numerous cases where reduction of hypertension progresses as caloric intake is diminished. There is, however, a wide margin of difference between sound and robust health and mere existence; there are many persons who should reduce their weight not so much to come within the 20% overweight figures of the insurance companies as to "feel good." Wide reading seems to convince that whereas there may be cases of obesity of endocrine origin, most of them are from just plain overeating of the fat-making foods. The medical profession may have to appeal to pulchritudinous pride rather than to the sound principles of hygiene in order to bring the obese to a realization of the possibilities of disease and death, yet it would seem that there is already enough scientific data available to justify the profession to urge all overweight persons to learn the principles of rational diet, that they may avoid the possibilities of diabetes and fatty degenerations later in life. Statistical and clinical evidence upon this important question should be welcomed by the medical profession, although already overburdened by positive expositions of the certain results which immediately follow reduction of intake of any of the rapidly growing list of vitamins. Incidentally it is interesting to note that it is a long time since much has appeared in the medical press about methyl guanidin, tyrotoxicon, cholin, hypoxanthin and the rest of that noble host so fully discussed by Brieger and Schmiedeberg less than half a century ago.

CLINICAL-PATHOLOGIC CONFERENCE

Case presented by Dr. George W. Waterman. The following mimeographed history was passed out.

F. D. Age, 50. Housewife. Admitted July 7, 1931; discharged Sept. 1, 1931.

C. C. Vaginal bleeding. Low abdominal pain and nervousness.

P. I. Patient is very indefinite. She says she has had nervous exhaustion for about six months, but has been going on until now, but she finally had to give in. For the past two or three weeks she has been unable to get out of bed at times, she also complains of low abdominal pain.

Patient also says she had severe flowing last winter which lasted 2-3 days. She has had three such spells since her last period 1-2 years ago. At times has had a yellowish discharge and it has been very thick.

There are no urinary symptoms, except frequency at night; there is no burning. Appetite is not good, takes only fluids as her mouth is parched. Bowels are irregular and lately she has been constipated.

P. E. Bl. Pr. 80/65.

The patient is an extremely undernourished, weak looking person. Her face is fairly full but the rest of her body is very poorly nourished.

Chest: Breasts are atrophied. No tenderness or tumors. Heart and lungs are negative to percussion and auscultation.

Admission Note: The patient comes in with advanced carcinoma with metastases that are extensive. She was referred immediately to the radium service. The patient was put on deep X-ray therapy treatment, to be treated with radium later.

X-Ray Examination: August 6, examination of the chest shows two large circular areas of increased density in the right mid-chest and base and a small area of increased density at the left base at the level of the fourth left rib anteriorly consistent with metastatic malignant disease. There is no evidence of bone involvement.

Operation: A large mass the size of a goose egg seen protruding from the orifice. This mass was found to be growing from the anterior and lateral walls of the vagina extending back to the cervix and involving the cervix. The mass was made up of soft, friable grossly malignant tissue, bled very freely. It involved the whole right side and extended on to the vaginal wall on the left side. This mass was deeply infiltrating into the surrounding tissues. The uterus was greatly enlarged and fixed in a firm mass which apparently filled the entire pelvis. Radium was inserted 6-3 mgm. and 9-2 mgm. needles. Radium was also inserted on August 4th for 120 hours.

7/12/31 The patient's condition is very poor. She has had a temperature yesterday and today.

7/21/31 Temperature is elevated. The patient takes nothing but liquids.

8/6/31 Radium has been put on the metastatic growth on her nose. X-rays of chest have been taken.

8/16/31 Patient seems to be growing weaker. She has a mass on the right side of her nose, probably a cancer which has been growing rapidly.

8/21/31 Patient had radium needles inserted into growth of nose 5-2 mgm. plat. needles.

8/27/31 Patient was placed on the D. L. yesterday. She has been irrational for several days, not excitable but talking absurdly.

9/1/31 Final Note: Patient has been growing very much more feeble. Back has broken down terribly in the last few days. The nose lesion has seemed a little smaller. Patient became cold today but pulse was maintained until this evening when the patient quietly expired.

Discussions

DR. WATERMAN: "This case is one that had a peculiar interest, as we will show. After she had been in the hospital two days she was taken to the operating room and treatment given. There was really no hope of saving this woman's life but we thought we could ease the pain a little and make her more comfortable. The local condition seemed to improve considerably. The growth where the needles were put in melted away and we were able to get a better examination of the vagina later on, but she had a hopeless mass in her pelvis and her course was downhill. About the middle of August, a small nodule appeared on the side of the nose. This first appeared like and was thought to be a little abscess under the skin, it was so soft that it seemed to fluctuate. We opened this because we thought there might be some pus, but nothing but a soft, friable tissue was found and when examined it was found to be carcinoma of the same type that was found in the pelvis. This was treated with radium and it had quite an effect on it, but the patient gradually became weaker and died on the first of September.

"This case is presented because of the wide dissemination of the cancer that occurred here. X-rays taken about a month before she died showed a definite involvement of the lungs. The main point is this, that epidermoid carcinoma of the cervix has been considered by us as a pretty localized disease. It generally kills by a local extension of the disease localized to the lymphatics and the pelvis. It generally causes the death by a blocking of the ureters. This case is exceptional. Here we have an epidermoid carcinoma which did extend very widely. Its extension was almost comparable it seemed with pigmented types of growth."

Demonstration of X-Ray Films

DR. BATCHELDER: "The X-ray of the chest demonstrates the area of metastasis. The circular areas

irregularly scattered through the chest, some large, some small, some more definitely and sharply outlined than others, but that is the typical picture of carcinoma in the lungs. I didn't realize yesterday when I was looking up the films that the patient had had X-ray treatment, and I did not treat the patient myself so I don't know how much treatment she had."

Q.: "I would like to know whether you have any information as to why this patient let herself go up to this point without seeking medical attention."

DR. WATERMAN: "This patient, I understand, came up from down in the country. I think she was just one of these poor unfortunate women who don't recognize these symptoms. They are still old-fashioned about going to a doctor. I don't know who saw her or who sent her into the hospital."

DR. COOKE: "In such advanced cases is it considered that treatment with radium is indicated?"

DR. WATERMAN: "I think our general attitude is that here is a woman who has been sent in with a fairly advanced lesion. We did not have any definite information that she had the extensive involvement that she did, but she had this large mass protruding from the vagina. It seemed that though we could not reduce the growth in the pelvis it would not do any harm to put some needles in the vagina. As far as any attempt on our part to cure her, we did not have that idea in our heads. It was a small dose and I think that we did make her more comfortable. I think we were justified in seeing what we could do."

Q.: "Did she have any anesthesia while you were doing this?"

A.: "Simply a little gas."

Q.: "Would not some other type of treatment such as cauterization have been as good as radium?"

A.: "I don't think heat would have served the purpose well. What we were aiming at particularly was this large mass which stuck out of the vagina. That was on the point of breaking down and bleeding. If we cauterized that off there would not be any chance for it to heal, you would have a terrible sluff in a couple of days. But by taking these needles and putting them in we got a disappearance of that outside growth entirely and a healing up of the epithelium all around as far as our needles went."

Q.: "Had she borne any children?"

A.: "She had eight children. Five living and three dead. She had twins in one pregnancy."

Q.: "No hereditary history possible?"

A.: "No. Father died of pneumonia. Mother cerebral hemorrhage. One aunt had tuberculosis. No history of carcinoma or diabetes."

Demonstration of Postmortem Material

DR. CLARKE: "From the pathological point of view the case was extremely interesting. I don't think I ever saw so many organs involved in any one individual.

"As far as the pelvis was concerned, there was no mass extending down into the vagina as Dr. Waterman described clinically, so that had been done away with by use of radium, but the cervix and a good part of the uterus itself was replaced by a mass of soft, friable tumor tissue and this extended out into the pelvic structures on all sides. There were large glands throughout the pelvis and there was tumor tissue surrounding the rectum although the rectal mucosa was not involved. Dr. Waterman has already told you about one metastatic growth that he removed from the nose. I think that was very unusual; to have a growth in the skin from an internal carcinoma. You have already seen the X-ray picture. There were, in both lungs, numerous large areas of tumor tissue. The liver contained nodules of metastatic tumor. The kidneys contained nodules of metastatic tumor. The adrenal glands contained metastatic tumor. In the heart there was growing in the epicardium two large tumor masses and a third was found growing in the myocardium in the left ventricle and extending out into the cavity of the left ventricle. The spleen is an organ which is not supposed to have metastatic growths in it. It contained three nodules."

Q.: "How about the brain?"

A.: "We were not allowed to open her head."

DR. WATERMAN: "She had symptoms toward the end which would make you think that she had something in the head."

Q.: "Any growth in the kidneys?"

A.: "Yes."

"Of course the explanation of all these metastasis is that the tumor in the pelvis had invaded the blood vessels and these are metastasis by way of the blood stream."

DR. WATERMAN: "I only want to emphasize again that it is quite a rare and unusual case. I have seen quite a number of these cases over a period of

eleven or twelve years and I don't ever remember seeing a case of epidermoid carcinoma of the cervix that disseminated as diffusely as this. There was one period a few years ago when I thought that carcinoma of the pelvis never went out of the pelvis, but I remember one case several years ago where the carcinoma spread very widely up over the whole abdominal wall. That was a very malignant growth. I think Dr. Clarke would call that a Type IV."

OBITUARY

DR. FREDERICK T. ROGERS, A.B., M.D.

We record with deep regret the death of Dr. Frederick T. Rogers Aug. 23, 1932, at his home in East Greenwich, R. I.

Dr. Rogers retired from practice about twelve years ago, but he will be remembered by most of the members of this Providence Medical Association by reason of his ability as an ophthalmologist and otologist and of his intense interest in, and contributions to, medical society activities.

Frederick Tuthill Rogers, M.D., was born in Alfred, N. Y., March 13, 1859, and moved with his family to Westerly, R. I., when a boy. After graduating from Union College in 1880, he studied medicine at the University of New York Medical School, from which he graduated in 1882 and built up a successful general practice in Westerly. His interest in diseases of the eye and ear led him to post-graduate study at the Manhattan Eye & Ear Infirmary, and in 1890 he moved to Providence where he practiced his chosen specialties ably and successfully until his retirement. Dr. Rogers had an amazing capacity for work coupled with an unusual ability for organizing and systematizing which made possible and enjoyable his varied activities as physician, pioneer automobilist, yachtsman, editor and world traveler. It was with great pride that he always retained his automobile registration number "15" which was first assigned to him in the early days of automobiles.

For more than twenty years he was surgeon to the Eye Department of the Rhode Island Hospital and at his retirement from active practice was consultant at the Rhode Island Hospital, St. Joseph's Hospital, Providence City Hospital, now the Charles V. Chapin Hospital, Pawtucket Memorial Hospital, Woonsocket Hospital, and was connected with many charitable organizations in Providence.

He was President of this Society from 1901 to 1902. He served as Treasurer of the Rhode Island Medical Society from 1897 to 1902, and held the unique honor of being the President of the State Society in 1911-1912 during the Centennial Anniversary of the founding of that Society. It was largely through his untiring efforts, organizing ability and financial acumen that this Medical Library Building became an accomplished fact for the housing of our valuable library and as a meeting place for the medical profession, and with no derogation of the other members of the various committees which made possible the erection of this building, it may be truthfully said that it stands as a monument to his devotion to the medical profession of Rhode Island.

As editor of the *Atlantic Medical Journal*, an influential organ at the opening of this century, he did pioneer work in exposing the fraudulent claims of the patent-medicine vendors. With characteristic thoroughness and sense of humor, he exposed the fake dandruff and baldness cures by publishing in that journal the quasi-scientific diagnoses and glittering promises which the manufacturers made from samples of hair sent to them from his collie dog and floor brush. He also was editor of the *Providence Medical Journal*, which later became the present RHODE ISLAND MEDICAL JOURNAL.

He was vice-chairman of the Ophthalmological Section of the American Medical Association in 1911 and was president of the New England Oph-

thalmological Society in 1912. While holding this office, the Society was entertained in Providence by Dr. Rogers, and at clinics which he arranged at the Rhode Island Hospital he demonstrated for the first time in Rhode Island the removal of mature cataract by suction, the so-called Vard Hulen operation. His skill and resourcefulness at the operating table was complemental to his skill as a refractionist and diagnostician in the consulting room and at the bedside.

Membership in medical societies meant to Dr. Rogers active participation in its scentific programs and its business affairs and his many contributions as essayist and in discussion showed a thorough grasp of his subject and a militant defense of his opinions. An example of his painstaking thoroughness and keen analysis is his paper read before the American Medical Association on "The Significance of Retinal Haemorrhages." Others of his medical society affiliations include the American Academy of Medicine, American Laryngological, Rhinological and Otological Society, the American Academy of Ophthalmology and Otolaryngology, and the Rhode Island Ophthalmological and Otological Society, of which he was the first president.

Dr. Rogers was an enthusiastic yachtsman, and for years this was his chief diversion and hobby. He was an expert navigator, and was equally at home in sailing and motor craft. He was at one time Commodore of the Rhode Island Yacht Club.

He spent much time in travel in this country, Europe, South America and the Far East, and made two round the world trips. Unfortunately the long looked for enjoyment and comfortable leisure which he anticipated would be possible on his retirement from the practice of medicine was soon denied him by the onset of a severe and crippling general arthritis which confined him to crutches for the last five or six years of his life, but his indomitable will and adventurous spirit would not be denied and he made his last world tour on crutches and last winter motored to Florida and return.

Dr. Rogers was twice married. His first wife was Carrie Gavitt, and three children were born of this union. Several years after her tragic death while with Dr. Rogers at a reunion of his class at Union College, Dr. Rogers married Mary Blanchard, who, with a son and daughter by his first marriage, survives him.

Dr. Rogers was of the highest type of physician and citizen, devoted to his profession, conscious of his civic duty and grateful to the profession which rightly bestowed its honors upon him.

J. W. Leech,
J. E. Mowry,
J. M. Peters,
Committee.

SOCIETIES

The Providence Medical Society

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Lucius C. Kingman, October 3, 1932, at 8:50 P. M. The records of the last meeting were read and approved.

The Standing Committee having approved their applications, the following were elected to membership: Herbert S. Abel, Frank J. Jacobson, Louis J. Fuhrmann, Anacleto Berrillo, J. Murray Beardsley, William F. Sullivan and Robert H. Whitmarsh. The standing committee proposed the following amendment to the by-laws: In Article 1, Section 2, on the second from last line, after the words, "open discussion," the following sentence shall be inserted. "He shall apportion the time for reading of papers and discussions thereof at the monthly meetings and shall keep the readings and discussions within the time limits assigned." This was so voted.

Dr. James W. Leech read an obituary of Dr. Frederick T. Rogers and it was voted to spread this on the records, send a copy to the Rhode Island Medical Journal and one to the family.

Dr. Albert H. Miller read the report of the committee appointed to look into the question of a business bureau of this Association. He explained that this was a majority report and that there was a dissenting minority report which he afterwards read. After discussion it was voted to accept the majority report adverse to the establishment of such a bureau.

Dr. Clinton S. Westcott moved that the chair appoint a committee on public health relations, said committee to consist of three members with a yearly change of one member. It was so voted.

Dr. Philip Batchelder read a paper on the Roentgen Ray Treatment of Sinusitis. There is considerable literature on such treatment of general infections, but little of sinusitis, but these latter re-

ports are favorable. He himself has had good results in his series of ten. One theory of the action of roentgen rays is that it stimulates the white cells and a study of the pathology makes it seem reasonable, to expect good results. Small doses are advised in all reports. He felt that there were enough good results seen to warrant further trial of this method. The paper was discussed by Drs. Adams, Gerber, L. B. Porter and Batchelder.

The meeting adjourned at 10:18 P. M. Attendance, 111. Collation was served.

Respectfully submitted,

PETER PINEO CHASE,
Secretary.

HOSPITALS

PROVIDENCE LYING-IN HOSPITAL

The Staff of the Providence Lying-In Hospital held a special meeting September 15, 1932. Reports for the past three months were presented and discussed. In August, 1932, there were 264 babies born in the hospital, the largest number of babies born for one month in the hospital's history.

Dr. Louis F. Middlebrook, of Hartford, Conn., has completed his services as House Surgeon and will practice general medicine and obstetrics in Hartford, Conn.

Dr. Milton E. Johnson of Attleboro, Mass., is now House Surgeon.

Dr. Stanley D. Davies of Paris, N. Y., who has been at the Rhode Island Hospital as one of the Assistant Superintendents, will serve for six months as resident in this hospital.

Dr. Harold A. Bergendahl of Tufts Medical School completed his services as Surgical Clerk and is now at the Lawrence General Hospital.

Dr. Frederick A. Webster, also of the same school, is now Surgical Clerk.

EDWARD S. BRACKETT, M.D.,
Secretary.

ST. JOSEPH'S HOSPITAL

The first fall meeting of the Staff Association of St. Joseph's Hospital was held October 13, 1932, Dr. William A. Horan, President, presiding. Routine business having been disposed of, Dr. Vincent J. Oddo, of the Urological Service, read a paper entitled, "Some Newer Concepts in the Treatment of Carcinoma of the Bladder, Especially Around the Ureteral Orifices." He outlined the present trend of treatment and added an original contribution to the already accepted modes of dealing with this disorder, citing three cases with very favorable end results. Discussion was opened by Dr. John F. Streker, continued by Drs. Hamilton and McGuirk and closed by Dr. Oddo.

Dr. Vincent A. Cianci, of the Associate Staff, reported an interesting case showing multiple pathological aspects, clinical pictures and unusual symptomatic changes; final diagnosis being carcinoma of the head of the pancreas. Discussion opened by Dr. William S. Streker, continued by Dr. James Hamilton and closed by Dr. Cianci.

The Rt. Rev. Monsignor Peter E. Blessing, V.G., Secretary of the Board of Trustees of the Hospital, addressed the assembled staff, dwelling mostly upon general hospital news and changes anticipated.

Collation was served by caterer, through courtesy of the Mother Superior, and the attendance was 88 members and four guests.

JOSEPH L. BELLIOTTI, M.D.,
Secretary.

BOOK REVIEWS

A PUBLICATION OF THE WHITE HOUSE CONFERENCE

1. Nutrition Service in the Field.
   Lucy H. Gellett, Chairman.
2. Child Health Centers: A Survey.
   J. H. Mason Knox, Jr., Chairman.

Century Co., Publisher

This volume is divided into two distinct and separate portions as indicated above. The first and larger section is an exhaustive study describing the role of the nutritionist in promoting the education of the layman and the physician in the nutritional requirements of children.

The second and smaller section is a survey and summary of the Child Health Centers and their work and aims.

This book is an excellent reference book for all physicians or laymen who are interested in or working for the progress in nutritional work among

children. It gives concisely and fully a comprehensive survey of the work being done in this field, and points the way towards further advance in child health.

"Papers on Surgery and Other Subjects," by George Tully Vaughan, M.D., LL.D., F.A.C.S. Washington, W. F. Roberts Company, Publishers, 1932.

In this volume the septuagenarian chief of the surgical department in Georgetown University Medical School has gathered together what he considers his most important contributions to medical literature during a long and active career. It contains some seventy-five or eighty scientific papers and case reports published between 1894 and 1923. In addition there is a considerable number of speeches, eulogies and articles written for encyclopedias at later dates up to 1931; and a brief but thunderous denunciation of companionate marriage published in 1928.

In his preface the author disclaims credit for any originality in theory or procedure save the now well known trick of using a bit of muscle as a hemostatic agent to stop otherwise uncontrollable oozing from delicate tissues or from bone. This procedure was first described by Vaughan in 1905.

The papers are simple and straightforward in style; lucid and succint in phraseology. They cover many subjects, embracing practically the entire field of surgery, and in them the historically-minded may trace the progress of surgical thought and practice in the past half century. In this connection the addition of a chronological index would greatly enhance the value of the collection.

This book belongs to a class that is growing; and we are glad that it is so. For this custom among our teachers of publishing in their riper years collections of their writings and thereby parading before the world the errors as well as the triumphs of their enthusiastic youth cannot but have a salutary effect upon the profession as a whole; and especially do their efforts inspire us whose *magna opera* still remain to be written to keep alive that spirit of clinical research which Sir James MacKenzie so aptly characterized as the keystone of medical progress.

The Practical Medicine Series. Obstetrics, edited by Joseph B. De Lee, A.M., M.D., Professor of Obstetrics, University of Chicago Medical School: Attending Obstetrician and Medical Director, Chicago Lying-in Hospital and Dispensary. Gynecology, edited by J. P. Greenhill, B.S., M.D., F.A.C.S., Attending Gynecologist, Cook County Hospital; Associate in Obstetrics, Northwestern University Medical School. Series 1931. Chicago. The Year Book Publishers, Inc., 304 South Dearborn Street.

This is a volume of a series issued yearly by the publishers, giving a summary of the literature both in this country and abroad, for the previous year. The book at hand is devoted wholly to obstetrics and gynecology, and comprises abstracts of articles, together with comments and criticisms by the editors, the matter being arranged by topics, facilitating ready reference. So complete is the work that within the covers of this one book we have a most satisfactory résumé of the recent progress in obstetrics and gynecology. The criticisms are by no means the least valuable part of the compendium, for they are laconic, pithy and most informative.

This year book is adapted for the use and information not only of the specialist, but also of the general practitioner who desires to be fully informed as to the newest things in obstetrics and gynecology. It should be in the bookcase, or better still, on the desk, of every one practicing in these lines and will be referred to almost daily. We cannot commend it too highly.

Dermatology and Syphilis; edited by Dr. Fred and Dr. Marion B. Sulzberger. Urology; edited by Dr. John H. Cunningham. Practical Medical Series. The Year Book Publishers, Inc., 1931.

This volume is a real summary of dermatology. The editors have adopted as their standard in selecting material, first, that it shall appeal to the general practitioner through its special attention to practical and therapeutic subjects, and second, that it shall include the less accessible contributions to dermatology. They have gone through the literature carefully from this standpoint, and give an admirable summary of the important practical and scientific contributions to diseases of the skin and syphilis in the last year.

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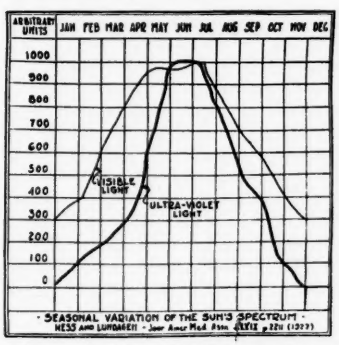

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Send for a trial-size can of Cocomalt, *free*. Send name and address to R. B. Davis Co., Dept. 60X Hoboken, N. J.

Cocomalt

Cocomalt is a scientific food concentrate of selected cocoa, sucrose, skimmed milk, malt extract, vanilla flavoring and added Vitamin D.

ADDS 70% MORE NOURISHMENT (FOOD-ENERGY) TO MILK
(Prepared according to label directions)